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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/489,079DATE: 02/11/2000
TIME: 09:59:31

Input Set: I489079.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: Billing-Medel, Patricia
 2 Cohen, Maurice
 3 Colpitts, Tracey
 4 Friedman, Paula
 5 Gordon, Julian
 6 Granados, Ed
 7 Hodges, Steve
 8 Klass, Mike
 9 Kratochvil, Jon
 10 Russell, John
 11 Stroupe, Steve
 12 <120> TITLE OF INVENTION: Reagents and Methods Useful for
 13 Detecting Diseases of the Breast
 14 <130> FILE REFERENCE: 6451.US.P1
 15 <140> CURRENT APPLICATION NUMBER: US/09/489,079
 16 <141> CURRENT FILING DATE: 2000-01-21
 17 <160> NUMBER OF SEQ ID NOS: 30
 18 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 19 <210> SEQ ID NO 1
 20 <211> LENGTH: 254
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Homo sapiens
 23 <220> FEATURE:
 24 <221> NAME/KEY: base_polymorphism
 25 <222> LOCATION: 94
 26 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
 27 this position
 28 <400> SEQUENCE: 1
 29 gtatacatc tttattaatc attttgcttc caacccatt tagcctgcc ttgaaatgca 60
 30 aaagtctgtt ccaaataaag ccttggaatt gaanaatgaa caaacattga gagcagatga 120
 31 gatactccca tcagaatcca aacaaaagga ctatgaagaa agttcttggg attctgagag 180
 32 tctctgtgag actgtttcac agaaggatgt gtgtttaccc aaggctgcgc atcaaaaaga 240
 33 aatagataaa ataa 254
 34 <210> SEQ ID NO 2
 35 <211> LENGTH: 278
 36 <212> TYPE: DNA
 37 <213> ORGANISM: Homo sapiens
 38 <400> SEQUENCE: 2
 39 gaaatgcaaa agtctgttcc aaataaagcc ttggaattga agaatgaaca aacattgaga 60
 40 gcagatgaga tactcccatc agaatccaaa caaaaggact atgaagaaag ttcttgggat 120
 41 tctgagagtc tctgtgagac tgtttcacag aaggatgtgt gtttaccxaa ggctgcgc at 180
 42 caaaaagaaa tagataaaat aaatggaaaa ttagaagggt ctctgttaa agatggtctt 240
 43 ctgaaggcta actgcggaat gaaagtttct attccaac 278
 44 <210> SEQ ID NO 3

w--> OK

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45 <211> LENGTH: 294
 46 <212> TYPE: DNA
 47 <213> ORGANISM: Homo sapiens
 48 <220> FEATURE:
 49 <221> NAME/KEY: base_polymorphism
 50 <222> LOCATION: 276
 51 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
 52 this position
 53 <400> SEQUENCE: 3
 54 ttttgcttct gacagtttct ttttcagtac acaaaacttc tttttcattt gttccatttt 60
 55 tcctgtacgt tggtcacagt gatctttttg aagttccctt gctctttcac aagaatgaac 120
 56 tgtatccaag atttttgata ggctagtga atcttctaata tttccactta ttttatccat 180
 57 ttctttttga tgtgtagcct tgggtacaca cacatcctct gtgaaacagt ctcacggaga 240
 58 ctctcagaat cccaagaatt ttctcaacct tctttngttt tgattctgaa ggga 294
 59 <210> SEQ ID NO 4
 60 <211> LENGTH: 248
 61 <212> TYPE: DNA
 62 <213> ORGANISM: Homo sapiens
 63 <220> FEATURE:
 64 <221> NAME/KEY: base_polymorphism
 65 <222> LOCATION: 247
 66 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
 67 this position
 68 <400> SEQUENCE: 4
 69 cagaatcaaaa acaaaagaag gttgaagaaa attcttgga ttctgagagt ctccgtgaga 60
 70 ctgtttcaca gaaggatgtg tgtgtacca aggctacaca tcaaaaagaa atggataaaa 120
 71 taagtggaaa attagaagat tcaactagcc tatcaaaaat cttggataca gttcattctt 180
 72 gtgaaagagc aagggaactt caaaaagatc actgtgaaca acgtacagga aaaatggaac 240
 73 aaatgana 248
 74 <210> SEQ ID NO 5
 75 <211> LENGTH: 254
 76 <212> TYPE: DNA
 77 <213> ORGANISM: Homo sapiens
 78 <220> FEATURE:
 79 <221> NAME/KEY: base_polymorphism
 80 <222> LOCATION: 2
 81 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
 82 this position
 83 <220> FEATURE:
 84 <221> NAME/KEY: base_polymorphism
 85 <222> LOCATION: 10
 86 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
 87 this position
 88 <220> FEATURE:
 89 <221> NAME/KEY: base_polymorphism
 90 <222> LOCATION: 19
 91 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
 92 this position
 93 <220> FEATURE:
 94 <221> NAME/KEY: base_polymorphism

w--> OK

w--> OK

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95 <222> LOCATION: 35
96 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
97 this position
98 <220> FEATURE:
99 <221> NAME/KEY: base_polymorphism
100 <222> LOCATION: 39
101 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
102 this position
103 <220> FEATURE:
104 <221> NAME/KEY: base_polymorphism
105 <222> LOCATION: 45
106 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
107 this position
108 <220> FEATURE:
109 <221> NAME/KEY: base_polymorphism
110 <222> LOCATION: 59
111 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
112 this position
113 <220> FEATURE:
114 <221> NAME/KEY: base_polymorphism
115 <222> LOCATION: 173
116 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
117 this position
118 <400> SEQUENCE: 5
W-->OK 119 gngctctgcn gtgtgaggnt tctcacactc atganaatna aaatnatctc ttacatgana 60
120 attgcatgtt gaaaaaggaa attgccatgc taaaactgga aatagccaca ctgaaacacc 120
W-->OK 121 aataccagga aaaggaaaat aaatactttg aggacattaa gattttaaaa ganaagaatg 180
122 ctgaacttca gatgacccta aaactgaaag aggaatcatt aactaaaagg gcattctaat 240
123 atagtgggca gctt 254
124 <210> SEQ ID NO 6
125 <211> LENGTH: 267
126 <212> TYPE: DNA
127 <213> ORGANISM: Homo sapiens
128 <220> FEATURE:
129 <221> NAME/KEY: base_polymorphism
130 <222> LOCATION: 45
131 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
132 this position
133 <220> FEATURE:
134 <221> NAME/KEY: base_polymorphism
135 <222> LOCATION: 51
136 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
137 this position
W-->OK 138 <400> SEQUENCE: 6
139 ttcaagaaaa agtcaagaac ctgctttcca cattgcagga gatgncttgt ntgcaaagaa 60
140 aaatgaatgt tgatgtgagt agtacgatata ataacaatga ggtgctccat caaccacttt 120
141 ctgaagctca aaggaaatcc aaaagcctaa aaattaatct caattatgcc ggagatgctc 180
142 taagagaaaa tacattgggt tcagaacatg cacaaagaga ccaacgtgaa acacagtgtc 240
143 aaatgaagga agctgaacac atgtatc 267
144 <210> SEQ ID NO 7

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145 <211> LENGTH: 240
146 <212> TYPE: DNA
147 <213> ORGANISM: Homo sapiens
148 <220> FEATURE:
149 <221> NAME/KEY: base_polymorphism
150 <222> LOCATION: 46
151 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
152 this position
153 <220> FEATURE:
154 <221> NAME/KEY: base_polymorphism
155 <222> LOCATION: 74
156 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
157 this position
158 <220> FEATURE:
159 <221> NAME/KEY: base_polymorphism
160 <222> LOCATION: 233
161 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
162 this position
163 <220> FEATURE:
164 <221> NAME/KEY: base_polymorphism
165 <222> LOCATION: 234
166 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a
167 this position
168 <400> SEQUENCE: 7
W--> 169 cctaggcgcc tagtgaacc ctgtgtcaaa aagaaaaaaa caaaaancaaa cttccaagac 60
W--> 170 ctcgagtgggt tttnnggagac cctgtatcac ttcaaataat gtgttaaaca agcatcttca 120
W--> 171 tctcattaaa tagaaatgtt gaaaaattgc ttttggaata attgacttat ggatatttca 180
W--> 172 tcaaatttac agttggctat gctttcttat tgtgcatact atgaaatgtt ttnnttcatt 240
173 <210> SEQ ID NO 8
174 <211> LENGTH: 2683
175 <212> TYPE: DNA
176 <213> ORGANISM: Homo sapiens
177 <400> SEQUENCE: 8
178 agtatacatt ctttattaat cattttgctt ccaaccccat ttagcctgcc attgaaatgc 60
179 aaaagtctgt tccaaataaa gccttggaat tgaagaatga acaaacattg agagcagatg 120
180 agatactccc atcagaatcc aaacaaaagg actatgaaga aagttcttgg gattctgaga 180
181 gtctctgtga gactgtttca cagaaggatg tgtgtttacc caaggctgcg catcaaaaag 240
182 aaatagataa aataaatgga aaattagaag ggtctcctgt taaagatggg cttctgaagg 300
183 ctaactgcgg aatgaaagtt tctattccaa ctaaagcctt agaattgatg gacatgcaaa 360
184 ctttcaaagc agagcctccc gagaagccat ctgccttcga gcctgccatt gaaatgcaaa 420
185 agtctgttcc aaataaagcc ttggaattga agaataaaca aacattgaga gcagatgaga 480
186 tactcccatc agaatccaaa caaaaaggact atgaagaaaag ttcttgggat tctgagagtc 540
187 tctgtgagac tgtttcacag aaggatgtgt gtttacccaa ggctacacat caaaaagaaa 600
188 tagataaaat aaatggaaaa ttagaagagt ctctgataa tgatggtttt ctgaaggctc 660
189 cctgcagaat gaaagtttct attccaacta aagccttaga attgatggac atgcaaaactt 720
190 tcaaagcaga gcctcccgag aagccatctg ccttcgagcc tgccattgaa atgcaaaaagt 780
191 ctgttccaaa taaagccttg gaattgaaga atgaacaaac attgagagca gatcagatgt 840
192 tcccttcaga atcaaaaacaa aagaacgttg aagaaaattc ttgggattct gagagtctcc 900
193 gtgagactgt ttcacagaag gatgtgtgtg tacccaaggc tacacatcaa aaagaaatgg 960
194 ataaaataag tggaaaatta gaagattcaa ctagcctatc aaaaatcttg gatacaattc 1020

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| | | | | | | | |
|-----|------------------------------|------------|-------------|-------------|-------------|-------------|------|
| 195 | attcttgtga | aagagcaagg | gaacttcaaa | aagatcactg | tgaacaatgt | acaggaaaaa | 1080 |
| 196 | tggaacaaat | gaaaaagaag | ttttgtgtac | tgaaaaagaa | actgtcagaa | gcaaaagaaa | 1140 |
| 197 | taaaatcaca | gttagagaac | caaaaagtta | aatgggaaca | agagctctgc | agtgtgaggt | 1200 |
| 198 | ttctcacact | catgaaaatg | aaaattatct | cttacctgaa | aattgcatgt | tgaaaaagga | 1260 |
| 199 | aattgccatg | ctaaaactgg | aaatagccac | actgaaacac | caataccagg | aaaaggaaaa | 1320 |
| 200 | taaatacttt | gaggacatta | agatttttaa | agaaaagaat | gctgaacttc | agatgacct | 1380 |
| 201 | aaaactgaaa | gaggaatcat | taactaaaag | ggcatctcaa | tatagtgggc | agcttaaagt | 1440 |
| 202 | tctgatagct | gagaacacaa | tgctcacttc | taaattgaag | gaaaaacaag | acaaagaaat | 1500 |
| 203 | actagaggca | gaaattgaat | cacaccatcc | tagactggct | tctgctgtac | aagaccatga | 1560 |
| 204 | tcaaattgtg | acatcaagaa | aaagtcaaga | acctgctttc | cacattgcag | gagatgcttg | 1620 |
| 205 | tttgcaaaga | aaaatgaatg | ttgatgtgag | tagtacgata | tataacaatg | aggtgctcca | 1680 |
| 206 | tcaaccactt | tctgaagctc | aaaggaaatc | caaaagccta | aaaattaatc | tcaattatgc | 1740 |
| 207 | aggagatgct | ctaagagaaa | atacattggt | ttcagaacat | gcacaaagag | accaacgtga | 1800 |
| 208 | aacacagtgt | caaatgaagg | aagctgaaca | catgtatcaa | aacgaacaag | ataatgtgaa | 1860 |
| 209 | caaacacact | gaacagcagg | agtctctaga | tcagaaatta | tttcaactac | aaagcaaaaa | 1920 |
| 210 | tatgtggctt | caacagcaat | tagttcatgc | acataagaaa | gctgacaaca | aaagcaagat | 1980 |
| 211 | aacaattgat | attcattttc | ttgagaggaa | aatgcaacat | catctcctaa | aagagaaaaa | 2040 |
| 212 | tgaggagata | tttaattaca | ataaccattt | aaaaaacctg | atatatcaat | atgaaaaaga | 2100 |
| 213 | gaaagcagaa | acagaaaaat | catgagagac | aagcagtaag | aaacttcttt | tggagaaaca | 2160 |
| 214 | acagaccaga | tctttactca | caactcatgc | taggaggcca | gtcctagcat | caccttatgt | 2220 |
| 215 | tgaaaatctt | accaatagtc | tgtgtcaaca | gaatacttat | tttagaagaa | aaattcatga | 2280 |
| 216 | tttcttcctg | aagcctacag | acataaaaata | acagtgtgaa | gaattacttg | ttcacgaatc | 2340 |
| 217 | tcgctctgca | ctccagccta | ggcgcttagt | gaaaccctgt | gtcaaaaaaga | aaaaaacaaa | 2400 |
| 218 | aacaaaacttc | caagacctcg | agtggttttt | ggagaccctg | tatcacttca | aataatgtgt | 2460 |
| 219 | taaacaagca | tcttcatctc | attaaataga | aatgttgaaa | aattgctttt | ggaataattg | 2520 |
| 220 | aattatggat | atttcatcaa | atttacagtt | ggctatgctt | tcttattgtg | catactatga | 2580 |
| 221 | aatgtttttc | ttcaaaaagt | gtttataagt | ggtaagttta | agaatggggt | tgacagcatt | 2640 |
| 222 | atcttttgtg | gttatttgat | taaacattta | ctaattgtgc | ata | | 2683 |
| 223 | <210> SEQ ID NO 9 | | | | | | |
| 224 | <211> LENGTH: 2683 | | | | | | |
| 225 | <212> TYPE: DNA | | | | | | |
| 226 | <213> ORGANISM: Homo sapiens | | | | | | |
| 227 | <400> SEQUENCE: 9 | | | | | | |
| 228 | agtatacatt | ctttattaat | cattttgctt | ccaaccccat | ttagcctgcc | attgaaatgc | 60 |
| 229 | aaaagtctgt | tccaaataaa | gccttggaat | tgaagaatga | acaaacattg | agagcagatg | 120 |
| 230 | agatactccc | atcagaatcc | aaacaaaagg | actatgaaga | aagttcttgg | gattctgaga | 180 |
| 231 | gtctctgtga | gactgtttca | cagaaggatg | tgtgtttacc | caaggctgcg | catcaaaaag | 240 |
| 232 | aaatagataa | aataaatgga | aaattagaag | ggtctcctgt | taaagatggg | cttctgaagg | 300 |
| 233 | ctaactgcgg | aatgaaagtt | tctattccaa | ctaaagcctt | agaattgatg | gacatgcaaa | 360 |
| 234 | ctttcaaagg | agagcctccc | gagaagccat | ctgccttcga | gcctgccatt | gaaatgcaaa | 420 |
| 235 | agtctgtttc | aaataaagcc | ttggaattga | agaatgaaca | aacattgaga | gcagatgaga | 480 |
| 236 | tactcccatc | agaatccaaa | caaaaggact | atgaagaaag | ttcttgggat | tctgagagtc | 540 |
| 237 | tctgtgagac | tgtttcacag | aaggatgtgt | gtttacccaa | ggctacacat | caaaaagaaa | 600 |
| 238 | tagataaaat | aaatggaaaa | ttagaagagt | ctcctgataa | tgatggtttt | ctgaaggctc | 660 |
| 239 | cctgcagaat | gaaagtttct | attccaacta | aagccttaga | attgatggac | atgcaaaactt | 720 |
| 240 | tcaaaagcaga | gcctcccag | aagccatctg | ccttcgagcc | tgccattgaa | atgcaaaaagt | 780 |
| 241 | ctgttccaaa | taaagccttg | gaattgaaga | atgaacaaac | attgagagca | gatcagatgt | 840 |
| 242 | tcccttcaga | atcaaaaaca | aagaacgttg | aagaaaaattc | ttgggattct | gagagtctcc | 900 |
| 243 | gtgagactgt | ttcacagaag | gatgtgtgtg | tacccaaggc | tacacatcaa | aaagaaatgg | 960 |
| 244 | ataaaaataag | tggaaaatta | gaagattcaa | ctagcctatc | aaaaatcttg | gatacaattc | 1020 |

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| Line | ? | Error/Warning | Original Text |
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| 30 | W | "N" or "Xaa" used: Feature required | aaagtctgtt ccaaataaag ccttggaatt gaanaatg |
| 58 | W | "N" or "Xaa" used: Feature required | ctctcagaat cccaagaatt ttctcaacct tctttngt |
| 73 | W | "N" or "Xaa" used: Feature required | aaatgana |
| 119 | W | "N" or "Xaa" used: Feature required | gngctctgcn gtgtgaggnt tctcacactc atganaat |
| 121 | W | "N" or "Xaa" used: Feature required | aataccagga aaaggaaaat aaatactttg aggacatt |
| 139 | W | "N" or "Xaa" used: Feature required | ttcaagaaaa agtcaagaac ctgctttcca cattgcag |
| 169 | W | "N" or "Xaa" used: Feature required | cctaggcgcc tagtgaaacc ctgtgtcaaa aagaaaaa |
| 170 | W | "N" or "Xaa" used: Feature required | ctcgagtggg tttnggagac cctgtatcac ttcaaata |
| 172 | W | "N" or "Xaa" used: Feature required | tcaaatttac agttggctat gctttcttat tgtgcata |